

Lesson Study in the United States

研究授業

Jeanne M. Wolf
National Institute of Education
Singapore
Jmwolf@nie.edu.sg
December, 2005



Basic Principles: What is Lesson Study?

Cyclical professional development process where teachers take an existing lesson and together develop and teach new *research* lessons. They:

- Observe the lessons
- Reflect upon and revise them
- Conduct another lesson study cycle
- Report on findings and share research lessons.

Japanese teacher's in a school can work on one long-term goal in the same content area for 3-4 years.

LET'S see: James Stigler video
Or [jday3-edit.wmv](#)

Two Origins of Lesson Study

1. According to Hiebert, L S originated in Japan when admirers of John Dewey met secretly to discuss his philosophy of education and developed the process that is now known as Japanese Lesson Study. After W W II, they were free to share their ideas on education as Japan's education system was being rebuilt. As a result, LS became an integral part of lesson planning in elementary and some middle schools. (Retrieved from http://apcentral.collegeboard.com/article/0_3045_151-165-0-34608_00.htm on November 28, 2005.)
2. According to Wilms (2003: 610), in 1872, *M.M. Scott* goes to Japan and demonstrates new teaching techniques, including what would become Japanese lesson study, at the first teacher training school in Tokyo.
 - 1999: Over 100 years later, lesson study take roots in the U.S.

INCREASING IMPORTANCE

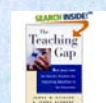
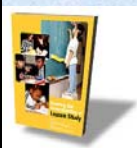
The New York Time
November 21, 2005
Editorial Observer

Why the United States Should Look to Japan
for Better Schools
By BRENT STAPLES

This reflects **the Japanese view** that successful teaching is the product of intensive teacher development and self-scrutiny. **In America, by contrast**, novice teachers are often presumed competent on Day One. They have few opportunities in their careers to watch successful colleagues in action. We also tend to believe that educational change would happen overnight - if only we could find the right formula.

Importance of Professional Development is Increasingly Recognized

- International Studies (e.g. TIMMS)
- National task forces
- Professional organizations
- Books
- Policy makers



Dr. James Stigler

"I once asked a group of American teachers to create a lesson plan. They took **15 minutes** to do it. . . . The American plans always say what the teacher is going to do. The Japanese plans ask **what the students are going to think** if the teacher does this. . . . Then I asked one of the American teachers to teach the lesson . . . It was a complete disaster; everything went wrong. . . . American teachers don't have any experience jointly talking about instruction. When they get together, they don't talk about lessons. They talk about all manner of other professional and personal issues but almost never discuss how they actually teach their students."

"Lessons in Perspective: How Culture Shapes Math Instruction in Japan, Germany, and the United States"
The California State University Institute for School Reform

Lesson Study Can be a Powerful Way to Change Professional Development (PD) & 21st. Century Education

- **Traditional focus:** what teacher does and how to do it better
- **Lesson study focus:** site specific; focus on what students are learning and how; teachers collaboratively examine processes and design learning environment
 - Teachers are researchers on element they can control—their lessons
 - Teachers have a direct role in their development and classrooms become sites for learning
 - LS is a culture about sharing and continuous improvement by lesson study teacher-researchers.
 - knowledge is transferred and shared

Lesson Study as PD

- Teachers are responsible for improvement of classroom practice
- Teacher becomes more student-centered
 - instruction that helps understand how students develop deep understandings and engage with subject disciplines.
(Fernandez, 2002:182)
- Teachers engage in continuous school based professional development
- New teachers are mentored by colleagues
- Schools are living laboratories for development and testing of new teaching techniques to help students learn (policy and practice can be linked)

Teacher Learning is at the Heart of Lesson Study: A Narrative

- "...really transforming for a lot of teachers – they say it is the most beneficial professional development they ever have done," says the coordinator of lesson study in the San Mateo-Foster City (CA) School District. "You end up examining your personal beliefs around teaching, and you learn more about your role as a teacher."

<http://www.teacherleaders.org/Resources/lessonstudy.html>

The Extent of Lesson Study

	2003	2004
Number of States	29	32
Lesson Study Groups	142	150
Schools*	247	335
School Districts*	81	125
Teachers*	1100	2300
List Serve Members	575+	900+
Research Centres		2

**There are 3 million public school teachers, over 94,000 public schools and 14,500 school districts in the U.S. (U.S. Department of Education. Digest of Educational Statistics.)

Source: Retrieved March 23, 2005, from <http://www.tc.edu/lessonstudy/lsgroups.html>). Compiled by S. Chokshi.

Lesson Study (LS) Initiatives Vary

- Groups are not concentrated in a single type of school, state or district; ten universities report groups.
 - Many participants are primary school teachers.
- Groups range from a few teachers to an entire state.
 - Over 80 % of the initiatives have under 30 members.
 - Most groups are in the same school and grade.
- Mathematics lesson study groups predominate, followed by science.
- Diverse and increasing unique collaborations are emerging to support lesson study.

1. Colorado Lesson Planning Around Theories of Probability
told by Greg Heid and Marilyn Carpenter



Six H.S. Teachers From Different Schools Meet to Develop LS Goal

In 2002, a pilot group worked together to complete a lesson study cycle. Teachers have different books and curriculum. Goal: Getting students to engage in thoughtful questioning. Support: communications help and services (i.e., videotaping, experts, and consultants, etc.) and teacher release time.

Key Ideas

- First, there is not just one protocol for lesson study. Used tools created by Teachers College.
 - Second, aims was deepened understanding of mathematics; identify a conceptual framework.
 - Third: a lesson is often broader than one class period, and that the lesson could stretch across multiple classes were key points Observers were instructed as to what areas to observe in the given lesson.
 - Homework was tied to the purpose and function of the lesson.
 - Teachers emerged with many questions of their own about how students learn math.
- Currently: 200 teachers in Colorado teachers in 30 school districts are involved in lesson study.**

Colorado Collaborators

- Colorado Council of Teachers of Mathematics
- Colorado Business Roundtable
- Colorado Department of Education
- McREL (private, nonprofit dedicated to improving education)
- RMC Research Corp
- Hyatt
- The University of Northern Colorado offers two credit hours toward masters level professional development for those taking part in Lesson Study.



2. EDC: Lesson Study Communities Project A Community Changing Its Curriculum and Culture: 20 Wareham Public Schools and 120 Teachers



“Sometimes as teachers we may have the feeling of working in a vacuum. Knowing that you are not alone in what you are doing is enlightening.”

<http://www2.edc.org/lessonstudy/about.asp#research>

Site Based Management in MA

- Lesson Study introduced to empower teachers to do their part in system-wide transformation.
- Teachers meet every Monday after school: grade level teams formulated long term and concept specific goals, and wrote lessons. They taught, observed and revised lessons.
- Project provides long-term sustained professional and curriculum development.
- Teachers received a stipend of \$1000 from NSF.

3. New York City Community District 2



- Lesson study is mandatory.
- Lesson study grew in a landscape that included many ongoing PD collaborative initiatives.
- Teachers viewed lesson study as just another form of professional development (Kelly, 2002).

4. Metropolitan Nashville Public Schools

- School board and the teachers' association set aside 5 days for lesson study
- James Stigler consulted.
- Principal served as a LS champion.
- Metro Nashville Education Association collaborated.
- Team trained the principal and two teachers from each participating elementary, middle school, high school.
- All participants were given the Teaching Gap.

5. Two State Initiatives In Delaware



1. In 2001-2002, Janice Itzel was the Christa McAuliffe teacher-on-loan in Lesson Study. (Retrieved from www.doe.state.de.us/lessonstudy.htm on January 14, 2005)

2. Ten week state writing initiative
Craft goals to focus on what students should know and be able to do with their writing or what teachers should know and be able to do in their writing instruction. Teachers focus on student understandings and misunderstandings.

6. University of Wisconsin-La Crosse Project: 2003-2004

- Aims: increase faculty interest in the initiative, help faculty develop expertise and assist participants in developing scholarly products
- Instructors participated in a research seminar, developed, taught and revised research lessons in their courses.
- Instructors supported with Lesson Study for College Teachers: An Online Guide, resources and tools.
- Reports form knowledge base for college instructors.
- 30 instructors in 16 disciplines.

Source: <http://www/uwlax.edu.sotl/lsp>

Use Blogs to Plan and Share Knowledge

Aim: to study how to help students value and use complexity to construct understanding.

- Professors used planning blogs in lieu of face-to face meetings.
- Team members post log entries, which anybody can read and comment.
 - help those new to Lesson Study understand the process
 - build a record of team progress
 - provides a draft manuscript for possible publication
 - allow others to make teaching improvements based on your lesson
- Blogs enhance planning, connectivity and communication.

(See <http://lessonstudy.blogs.com/englishsotl/>)

7. Hybrid Model in Idaho

- Lesson study and authentic assessment

Stewart, R. and Brendefur, T. (2005). Fusing Lesson Study and Authentic Achievement: A Model for Teacher Collaboration. Phi Delta Kappan.

8. Patterson, N.J. School No. 2 Case: LS is a Simple Idea but a Complex Process

- 16 5th and 6th grade math teachers, *Japanese* coaches, math facilitators and the principal formed 5 lesson study groups and met two hours per week.
- Planning:** *Japanese* focused on long-term goals but **Americans** were more likely to adopt curriculum lenses.
- Observations:** *Japanese* took copious notes while **Americans** preferred their practitioner roles.
- Debriefing:** *Japanese* related grounded observations to goals and curriculum while **Americans** had holistic responses and less specific curriculum focus in regard to student learning.
- Revisions:** **American** teachers tended to be reactive while *Japanese* tended to be proactive.

Sharing Local and Collective Knowledge

- Collaborations with Outside Advisors and Experts
- Lesson Study Open Houses
- Conferences
- Web sites: public and LS group
 - Sites come and go
 - Online professional development Sites for discussion forums
 - Sharing materials, tools
- Clearinghouses
- Blogs
- Reports/ Publications/Conferences/Books



Communicating with New Technologies and Sharing Knowledge

- Creating new spaces to connect teachers and honor importance of teaching.
- Contributing to a broader content and pedagogical knowledge bases but..
- More downloads than uploads
- More expert than teachers on lesson study sites.

Conclusions

- Teachers recognize the transformative power of LS in diverse LS initiatives
- Resources, collaborations and leadership contribute to sustainability.
- Large body of LS research by and for teachers does not exist yet
- LS has *potential* to contribute to meaningful pedagogical and content area change and change professional development.

What is Missing?

- Essential components of LS and whether these components change over time.
 - Some lesson study may not be lesson study.
- Negative teacher voices
- More videos, work samples, LS reports, and public open houses
- Ways to nurture U.S. teacher observational skills and content knowledge
- Roles and contributions of outsiders
- Evidence of student achievement.

Summary of Key Enablers

- Inside and Outside Collaborations
 - "It would be very difficult to transform the way your school does professional development without 'knowledgeable others.'"
- Collaborative, Reflective School Cultures
- Clear Curriculum in Place
- Perceptions of Personal and Professional Growth as Teachers Take Control over their Development
- Incremental Transformation→Snowball Effect
- Broad Dissemination Mechanisms.

Summary of Key Challenges

- ❑ Realizing that penetrating core practices of teaching and learning; changing hearts and minds takes time
- ❑ Recreating the spirit of lesson study through a collaborative, reflective culture that includes peer observations and ongoing improvement
 - Sharpening research and reflection skills
 - Becoming better teachers and learners
- ❑ Bringing together resources and making organizational adjustments to help teachers use LS productively and change practices
- ❑ Ongoing communication and sharing knowledge.

The Promise of Lesson Study

Lesson Study promotes authentication of knowledge and performance within the self as learner. There is no longer the sense of a static body of knowledge being delivered to learners, but rather a sense of guiding learners as they define and understand their own knowledge within the community. Lesson Study models the type of learning for teachers that it promotes for students.

Source: Finken, T., Matthews, M., HLas, C. & Schmidt, J. (2004) Integrating lesson study for pre-service and inservice teachers. Retrieved November 1, 2005 from http://myweb.uiowa.edu/ctlas/nctm04_session34/

